



MS APPEAL BRIEF - PATENTS
Docket No.: 0941-0911P
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Cheng-Chieh LIU et al.

Application No.: 10/772,322

Confirmation No.: 006485

Filed: February 6, 2004

Art Unit: 2834

For: MOUNTING STRUCTURE FOR MOTOR
CONTROLLER OF HEAT-DISSAPATING
DEVICE

Examiner: D. D. Le

APPEAL BRIEF TRANSMITTAL FORM

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith is an Appeal Brief on behalf of the Appellants in connection with the above-identified application.

The enclosed document is being transmitted via the Certificate of Mailing provisions of 37 C.F.R. § 1.8.

A Notice of Appeal was filed on March 23, 2006.

04/19/2006 JADD01 08000068 10772322

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Applicant claims small entity status in accordance with 37 C.F.R. § 1.27.

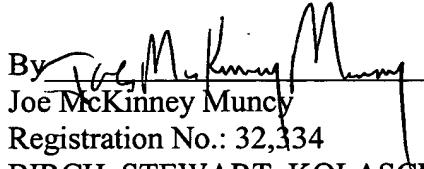
The fee has been calculated as shown below:

- Extension of time fee pursuant to 37 C.F.R. §§ 1.17 and 1.136(a) - \$@@@.
- Fee for filing an Appeal Brief - \$500.00 (large entity).
- Check(s) in the amount of \$500.00 is(are) attached.
- Please charge Deposit Account No. 02-2448 in the amount of \$500.00. A triplicate copy of this sheet is attached.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: April 17, 2006

Respectfully submitted,

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Attachment(s)



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Examiner: D. D. Le

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

As required under § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on March 23, 2006, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

| | |
|------|-----------------------------------|
| I. | Real Party In Interest |
| II | Related Appeals and Interferences |
| III. | Status of Claims |
| IV. | Status of Amendments |
| V. | Summary of Claimed Subject Matter |

| | |
|------------|---|
| VI. | Grounds of Rejection to be Reviewed on Appeal |
| VII. | Argument |
| VIII. | Claims |
| IX. | Evidence |
| X. | Related Proceedings |
| Appendix A | Claims |

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

DELTA ELECTRONICS, INC. of Taiwan by virtue of assignment recorded at reel 014969, frame 0894.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 23 claims pending in this application.

B. Current Status of Claims

1. Claims canceled: None
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: 1-23
4. Claims allowed: None
5. Claims rejected: 1-23

C. Claims On Appeal

The claims on appeal are claims 1-23

IV. STATUS OF AMENDMENTS

Applicants filed a response on March 23, 2006, to answer the objections to the drawings only. This response was filed on the same day as the Notice of Appeal. The Advisory Action of April 7, 2006, indicates that the drawing objection and the 35 U.S.C 112, second paragraph rejections are overcome.

V. SUMMARY OF CLAIMED SUBJECT MATTER

In general, the present invention relates to a fan for dissipating heat in an electronic device. The fan includes a chassis 21 (Fig. 2) having an upstanding sleeve 212 over which a stator 24 is placed. A motor controller 23 is connected to the chassis by way of a container 22 which is first placed on the chassis using hooks 222 which meet with holes 211. In the embodiment of Fig. 3, the container 32 is formed by a pair of positioning pillars 321. The motor controller 33 is inserted in the slots formed in the U shaped pillars. In the embodiment of Fig. 4, the pillars 42 form the container. The pillars 42 are attached to the lower edge of the stator plates and extend downwardly into the region of the lower cover portion 441. The motor controller 43 is disposed between the pillars 42 in a similar fashion to the arrangement shown in Fig. 3.

Claim 1 includes a container 22, 32, 42 for mounting a motor controller 23, 33, 43 for a heat dissipating device having a chassis 21, 31, 41. The container includes a main body, either the “box” of container 22, or the pillars of containers 32 and 42. This main body is mounted on the chassis 21, 31, 41 and has a slot 221, or the slot is formed by the U shaped cross section of the pillars, to receive the motor controller.

Claim 2 states that the container is substantially square, as shown in Fig. 2.

Claim 3 states that the slot has a U shaped profile of the motor controller and is in the central portion of the container. This is shown in Fig. 2.

Claim 4 states that the container has at least one hook, 222 to secure the container.

Claim 5 states that the container is formed by a plurality of positioning pillars which are seen in Figs. 3 and 4 as 32 and 42.

Claim 6 states that the pillars have U shaped cross sections and are separated according to the profile of the controller. This is seen in Figs. 3 and 4.

Claim 7 states that the container is mounted and adhered to, or integrally formed on the chassis. This is found in the Specification at page 6, line 10.

Claim 8 is the second independent claim which states that heat dissipating device contains a chassis 21, 31, 41, a stator 24, 34, 44, a rotor surrounding the stator and coupled thereto, shown in Fig. 4 as element 45 and also shown in regard to the prior art as element 14. The claim also includes a motor controller for driving and controlling the fan, 23, 33, 43 and a container mounted on the chassis and having a slot, 22, 32, 42.

Claims 9, 10, and 12-14 correspond to claims 2, 3, and 5-7.

Claim 11 is similar to claim 4 but further points out that the chassis has a plurality of holes 211 (Fig. 2) and a container has a plurality of hooks 222, engaging the holes and securing the container on the chassis.

Claim 15 describes the plurality of pins of the motor controller having broadened contacts to which a plurality of wires are connected. This is seen in Fig. 5 and described on page 7, line 1-7. The pins 531 have broadened ends forming contacts 532 on which are mounted wires 533.

Claim 16 describes the controller as an integrated circuit to control the heat dissipating device and detect the phase change of magnetic poles of the stator. This is specifically described at page 6, lines 27-29.

Claim 17 is a third independent claim and describes a heat dissipating device as having a chassis 21, 31, 41, a stator 24, 34, 44 disposing the chassis, a rotor 45 surrounding the stator or coupled to the stator, a motor controller 23, 33, 43 for driving and controlling the heat dissipating device and a container being directly mounted on and protruding from the stator 42 (Fig. 4) and having a slot to secure the controller.

Claim 18 describes the stator as having a cover portion 441 (Fig. 4 and page 6, lines 17-29). The container 42 is mounted in the lower cover portion (page 6, line 23).

Claim 19 states that the container is formed by a plurality of positioning pillars 42 disposed on the cover portion (Fig. 4).

Claims 20 and 21 correspond to claims 6 and 7 or 13 and 14. Claims 22 and 23 correspond to claims 15 and 16.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

(1) Claims 17, 18, 21, and 22 are rejected under 35 U.S.C 102(b) as anticipated by Horiuchi et al. (U.S. Patent 5,969,445).

(2) Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being obvious of Horiuchi et al. in view of Doemen et al. (U.S. Patent 4,482,849).

(3) Claim 23 is rejected under 35 U.S.C. 103(a) as being obvious over Horiuchi et al. in view of Horng (U.S. Patent 6,462,443).

(4) Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being obvious over Shirotori (U.S. Patent 4,818,907) in view of Horng and further in view of Muller (U.S. Patent 4,554,473).

(5) Claims 4-6 are rejected under 35 U.S.C. 103(a) as being obvious over Shirotori in view of Horng and Muller and further in view of Doemen et al.

(6) Claims 8-10, 14 and 15 are rejected under 35 U.S.C. 103(a) as being obvious over Hoover et al. (U.S. Patent 4,910,420) in view of Horiuchi et al.

(7) Claims 11-13 are rejected under 35 U.S.C. 103(a) as being obvious over Hoover et al. in view of Horiuchi et al. in further in view of Doemen et al.

(8) Claim 16 is rejected under 35 U.S.C. 103(a) as being obvious over Hoover et al. in view of Horiuchi et al. and further in view of Horng.

VII. ARGUMENT

(1) Rejection of claims 17, 18, 21 and 22 as being anticipated by Horiuchi et al.

The Examiner points out that the reference shows a chassis 46, a stator 12 disposed on the chassis, a rotor 5, a motor controller 55 and a container 56 to secure the motor controller. The element 56 is not actually a container, but a heat sink on which the motor controller is mounted. The Examiner states that the container is protruding from the stator.

Applicants disagree with the Examiner. The stator 12 is mounted on the chassis at the center of the motor while the heat sink is mounted on the edge of the chassis, nowhere near the stator. Applicants do not understand how the heat sink 56 can be directly mounted on and protruding from the stator when it is a substantial distance therefrom. The Examiner is apparently trying to include the chassis and structure 13 in the stator. However, these are listed as separate elements in the claim and the stator is described as being disposed on the chassis. Thus, the chassis cannot be included in the stator if the stator is disposed thereon. Thus, Applicants disagree that the heat sink 56 is mounted on and protruding from the stator. Further, Applicants submit that the heat sink 56 does not have a slot to secure the controller. Thus, Applicants submit that claim 17 is not anticipated by Horiuchi et al.

Claims 18, 21 and 22 further describe the stator as having a cover portion and that the container is mounted on, adhered to or integrally formed on the cover portion. Applicants do not see a cover portion at all for the stator, except for the rotor which covers the entire top of the stator. However, the rotor is not near the heat sink. Accordingly, Applicants submit that these features are also not seen by the reference. Claim 22 also describes the plurality of pins with broadened contacts connected to a plurality of wires. Applicants do not see these features either. It is further noted that the Examiner has not specified where the features of claim 18, 21 and 22 are found.

It is further noted that the sentences describing claims 18, 21 and 22 refer to the Horng reference rather than the Horiuchi et al. reference. It is believed that this was merely an error on the Examiner's part and that the Horiuchi et al. reference was meant to be included.

(2) Rejection of claims 19 and 20 as being obvious over Horiuchi et al. in view of Doemen et al.

First, Applicants submit that claims 19 and 20 are allowable based on their dependency from allowable claim 18. Further, these claims describe that the container is formed by a plurality of positioning pillars having U shaped cross sections and separated according to the profile of the motor controller. The Examiner refers to Doemen et al. to show pillar 56. In fact,

Doemen does not show pillars. Column 3, lines 1-5 make it clear that element 56 is an enlargement of base plate 55 which extends downwardly into recesses of the board 28. Thus, element 56 performs a function of pegs going into corresponding holes to hold the base plate into position. This does not show a plurality of pillars each having a U shaped cross section. In fact, Applicants see no U shaped cross section anywhere relating to these enlargements. Furthermore, Applicants submit the Examiner is not showing any motivation for combining the references. The Examiner points out that the enlargements are for the purpose of making an easy connection and that one skilled in the art would recognize its purpose. However, the Examiner has not even attempted to show why Horiuchi et al. would be motivated to use such a device without a need being shown for the necessity of an easy connection.

(3) Rejection of claim 23 as being obvious over Horiuchi in view of Horng

First, claim 23 is allowable based on its dependency from allowable claim 17. Even if Horng shows a drive device, Applicants submit that claim 23 remains allowable based on its dependency from allowable claim 17.

(4) Rejection of claims 1-3 and 7 as being obvious over Shirotori in view of Horng and Muller.

The Examiner states that Shirotori shows a container 7 for mounting a sensor 6 in a motor having a chassis 1. The Examiner also states that the container includes a main body directly mounted on the chassis and having a slot 1b to receive the sensor 6.

Applicants disagree with the Examiner's understanding of the reference. The Examiner refers to sealing body 7 as a container for mounting a sensor. First, the sensor 6 is mounted on circuit board 19 and does not touch container 7. It also does not touch the through hole 1b which is formed through the housing 1. Thus, it is not possible for the sensor to be "mounted" to the container 7 or the housing 1.

The Examiner further states the container has a main body which is directly mounted on the chassis 1. The Examiner does not identify what the main body is except to refer to Figure 1. Applicants do not understand what the Examiner considers the main body to be. The Examiner also states the slot 1b receives a motor sensor. While it is true that the sensor is received within the through hole 1b, it does not contact the through hole. This differs from the present invention, wherein the slot is formed so as to hold the motor controller. Further, it is not clear what the main body is since the main body is stated in the claim as having a slot to receive the motor controller. Thus, Applicants submit that Shirotori does not show the claimed elements as suggested by the Examiner.

The Examiner admits that Shirotori does not show that the motor is used for a heat dissipating device and that the sensor is the motor controller. The Examiner relies on the combination of both Horng and Muller to teach this features. Applicants submit that it would not be obvious to combine these three references since there is no teaching of the need to do so.

Furthermore, Applicants submit that the structure shown in the Shirotori reference is similar to the prior art device shown in Fig. 1(b) of the present application. The present invention has been designed to improve on this arrangement and contains fewer elements than such a prior art device.

Concerning claims 2, 3 and 7, Applicants do not understand how the container can be square, especially since it is not clear what the container is. In regard to claim 7, the claim states the container is mounted on, adhered to or integrally formed on the chassis. It is not seen that any of the references teach this feature. Accordingly, Applicants submit that claims 2, 3 and 7 are further allowable.

(5) Rejection of claims 4-6 as being obvious over Shirotori in view of Horng and Muller and further in view of Doemen et al.

The Examiner admits that the combination of Shirotori, Horng and Muller does not show the hook of claim 4. The Examiner relies on Doemen et al. to show hook 179 and 180.

Applicants point out that column 7, line 14 of the Doemen et al. reference states that these elements are centering bolts and not hooks. Accordingly, Applicants submit the Examiner is incorrect in stating that Doemen et al. shows such a hook. In regard to claims 5 and 6, the Examiner again points out the use of pillars 56. As pointed out above, Applicants submit that enlargements 56 which extend into the recesses of board 28 are not pillars and do not have U shaped cross sections.

(6) Rejection of claims 8-10, 14, and 15 as being obvious over Hoover et al. in view of Horiuchi et al.

The Examiner states that Hoover et al. shows a heat dissipating device having a chassis 80, a stator 72, a rotor 54 and motor controller 108. The Examiner admits that Hoover et al. does not show a container directly mounted on the chassis and having a slot to receive the motor controller. The Examiner relies on Horiuchi to show a container directly mounted on the chassis and having a slot.

The Hoover et al. reference shows an electric motor having a rotor, stator and chassis as well as a motor controller 108. However, the motor controller is disposed directly on a circuit board 98. Thus, this reference does not in any manner show how the main features of the present invention are related to the container for receiving the controller. The Examiner relies on Horiuchi et al. to show a container 56. However, as discussed above, Horiuchi et al. does not show a container, but rather a heat sink which is mounted on chassis 46. Further, as pointed out above, the heat sink does not have a slot to receive the motor controller, but instead the motor controller is mounted on a side of a leg extending from the heat sink. Applicants submit that the combination of Hoover et al. and Horiuchi et al. still does not teach the present invention since neither reference nor their combination teach the concept of the container mounted on the chassis having a slot to receive the controller. At best, the combination of the two references would show the motor controller mounted on the heat sink which is attached to a circuit board and having no slots. Accordingly, Applicants submit that claim 8 is allowable there over.

Claims 9 and 10 relate to the shape of the container and the shape of the slot. Applicants submit that neither of the references show these features and that these claims are additionally allowable. Claim 14 describes that the container is mounted on, adhered to, or integrally formed on the chassis. This is not described in the references. Claim 15 describes the pins with broadened contacts to which the wires are attached. This is not described in either of the references. Accordingly, Applicants submit that these claims are additionally allowable.

(7) Rejection of claims 11-13 as being obvious over Hoover et al. in view of Horiuchi et al. and further in view of Doemen et al.

The Examiner states that the combination of Hoover and Horiuchi does not describe the hole and hook arrangement. The Examiner relies on Doemen et al. to show hooks 179, 180 and holes for mounting the container. However, as pointed out above, Applicants submit that elements 179 and 180 of Doemen et al. are not hooks, but rather centering bolts. Accordingly, Applicants submit that claim 11 is further allowable.

Claims 12 and 13 relate to the formation of the container by positioning pillars having U shaped cross sections. The Examiner again relies on Doemen et al. to show these features. As pointed out above, enlargements 56 of Doemen et al. are not pillars and do not have U shaped cross sections. Accordingly, Applicants submit that claims 12 and 13 are further allowable.

(8) Rejection of claim 19 as being obvious over Hoover et al. in view of Horiuchi et al. and Horng.

The Examiner relies on Horng to teach the feature of an integrated circuit which is not shown by the combination of Hoover and Horiuchi et al. Applicants submit that even if Horng teaches the use of an integrated circuit, this claim remains allowable based on its dependency from allowable claim 8.

VIII. CLAIMS

A copy of the claims involved in the present appeal is attached hereto as Appendix A.

IX. EVIDENCE

No evidence is being submitted.

X. RELATED PROCEEDINGS

No related proceedings are referenced in II. above, or copies of decisions in related proceedings are not provided, hence no Appendix is included.

CONCLUSION

In view of the foregoing Applicants submit that the Examiner was in error in rejecting the claims. Accordingly, Applicants request that the Examiner be reversed.

Should there be any matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Robert F. Gnuse (Registration No. 27,295) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: April 18, 2006

Respectfully submitted,

By 
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Registration No.: 32,334

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APPENDIX A

Claims Involved in the Appeal of Application Serial No. 10/772,322

1. A container for mounting a motor controller for a heat-dissipating device having a chassis, said container comprising a main body directly mounting on the chassis of the heat-dissipating device and having a slot to receive the motor controller.
2. The container as claimed in claim 1, wherein the container is substantially square.
3. The container as claimed in claim 2, wherein the slot is shaped according to the profile of the motor controller and is formed in the central portion of the container.
4. The container as claimed in claim 1, wherein the container has at least one hook to secure the container on the chassis of the heat-dissipating device.
5. The container as claimed in claim 1, wherein the container is formed by a plurality of positioning pillars.
6. The container as claimed in claim 5, wherein the positioning pillars have U-shaped cross sections respectively and are separated according to the profile of the motor controller.
7. The container as claimed in claim 1, wherein the container is mounted on, adhered to, or integrally formed on the chassis.
8. A heat-dissipating device, comprising:

a chassis;
a stator disposed on the chassis;
a rotor surrounding the stator and coupled to the stator;
a motor controller driving and controlling the heat-dissipating device; and
a container directly mounted on the chassis and having a slot to receive the motor controller.

9. The heat-dissipating device as claimed in claim 8, wherein the container is substantially square.

10. The heat-dissipating device as claimed in claim 9, wherein the slot is shaped according to the profile of the motor controller and is formed in the central portion of the container.

11. The heat-dissipating device as claimed in claim 8, wherein the chassis has a plurality of holes, and the container has a plurality of hooks engaging the holes and securing the container on the chassis.

12. The heat-dissipating device as claimed in claim 8, wherein the container is formed by a plurality of positioning pillars.

13. The heat-dissipating device as claimed in claim 12, wherein the positioning pillars have U-shaped cross sections respectively and are separated according to the profile of the motor controller.

14. The heat-dissipating device as claimed in claim 8, wherein the container is mounted on, adhered to, or integrally formed on the chassis.

15. The heat-dissipating device as claimed in claim 8, wherein the motor controller has a plurality of pins with broadened contacts to which a plurality of wires of an external device are connected.

16. The container as claimed in claim 9, wherein the motor controller is an integrated circuit to control the heat-dissipating device and detect the phase change of magnetic poles of the stator.

17. A heat-dissipating device, comprising:
a chassis;
a stator disposed on the chassis;
a rotor surrounding the stator and coupled to the stator;
a motor controller driving and controlling the heat-dissipating device; and
a container directly mounted on and protruding from the stator and having a slot to secure the motor controller.

18. The heat-dissipating device as claimed in claim 17, wherein the stator has a cover portion, and the container is mounted thereon.

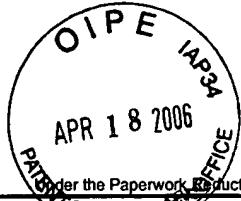
19. The heat-dissipating device as claimed in claim 18, wherein the container is formed by a plurality of positioning pillars disposed on the cover portion.

20. The heat-dissipating device as claimed in claim 19, wherein the positioning pillars have U-shaped cross sections respectively and are separated according to the profile of the motor controller.

21. The heat-dissipating device as claimed in claim 18, wherein the container is mounted on, adhered to, or integrally formed on the cover portion.

22. The heat-dissipating device as claimed in claim 17, wherein the motor controller has a plurality of pins with broadened contacts to which a plurality of wires of an external device are connected.

23. The heat-dissipating device as claimed in claim 17, wherein the motor controller is an integrated circuit to control the heat-dissipating device and detect the phase change of magnetic poles of the stator.



PTO/SB/17 (12-04v2)

Approved for use through 7/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL For FY 2005

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 500.00)

| Complete if Known | |
|----------------------|--------------------------|
| Application Number | 10/772,322-Conf. #006485 |
| Filing Date | February 6, 2004 |
| First Named Inventor | Cheng-Chieh LIU |
| Examiner Name | D. D. Le |
| Art Unit | 2834 |
| Attorney Docket No. | 0941-0911P |

METHOD OF PAYMENT (check all that apply)

Check Credit Card Money Order None Other (please identify): _____
 Deposit Account Deposit Account Number: 02-2448 Deposit Account Name: Birch, Stewart, Kolasch & Birch, LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee
 Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 Credit any overpayments

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| <u>Application Type</u> | FILING FEES | | SEARCH FEES | | EXAMINATION FEES | | <u>Fees Paid (\$)</u> |
|-------------------------|-----------------|---------------------|-----------------|---------------------|------------------|---------------------|-----------------------|
| | <u>Fee (\$)</u> | <u>Small Entity</u> | <u>Fee (\$)</u> | <u>Small Entity</u> | <u>Fee (\$)</u> | <u>Small Entity</u> | |
| Utility | 300 | 150 | 500 | 250 | 200 | 100 | |
| Design | 200 | 100 | 100 | 50 | 130 | 65 | |
| Plant | 200 | 100 | 300 | 150 | 160 | 80 | |
| Reissue | 300 | 150 | 500 | 250 | 600 | 300 | |
| Provisional | 200 | 100 | 0 | 0 | 0 | 0 | |

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

Small Entity
Fee (\$) Fee (\$)

50 25

Each independent claim over 3 (including Reissues)

200 100

Multiple dependent claims

360 180

| <u>Total Claims</u> | <u>Extra Claims</u> | <u>Fee (\$)</u> | <u>Fee Paid (\$)</u> | <u>Multiple Dependent Claims</u> |
|---------------------|---------------------|-----------------|----------------------|--------------------------------------|
| 23 | - 23 = | x | = | <u>Fee (\$)</u> <u>Fee Paid (\$)</u> |
| 3 | - 3 = | x | = | |

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| <u>Total Sheets</u> | <u>Extra Sheets</u> | <u>Number of each additional 50 or fraction thereof</u> | <u>Fee (\$)</u> | <u>Fee Paid (\$)</u> |
|---------------------|---------------------|---|-----------------|-----------------------|
| | - 100 = | /50 (round up to a whole number) x | = | <u>Fees Paid (\$)</u> |

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): 1402 Filing a brief in support of an appeal

500.00

SUBMITTED BY

| | | | | | |
|-------------------|--------------------|--------------------------------------|--------|-----------|----------------|
| Signature | | Registration No. (Attorney/Agent) | 32,334 | Telephone | (703) 205-8000 |
| Name (Print/Type) | Joe McKinney Muncy | | | Date | April 18, 2006 |